

Endocrine Disruptors: Finding Solutions

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“Bringing Oregonians Together for a Healthy Environment”

How we are exposed

- Consumer products (e.g. toys, clothing, cell phones, computers, cleaning compounds, furniture, cosmetics)
- Food consumption (e.g. certain fish from the Willamette)
- Drinking water (e.g. pesticides in rural wells)
- Inhalation

Regulatory system gaps

- Most chemicals not tested for human health impacts
- Of the chemicals that are tested, often the tests are not sophisticated enough to determine if its an endocrine disruptor
- Regulatory system focuses on individual chemicals

Known and Suspected Endocrine Disrupting Chemicals

- **Dioxin**
- **Phthalates**
- **Certain pesticides**
- **Brominated Flame Retardants**
- **Bisphenol A**
- **Pentachlorophenol**
- **PCBs**

Dioxins & Furans

- Combustion by-product
- Released during backyard burning
- Industrial sources primarily wood fuel boilers and pulp and paper facilities
- Found in fish and sediment throughout Willamette River basin



Some Pesticides

Examples:

- Atrazine
- Lindane
- Chlorpyrifos
(Dursban)



Note: Atrazine, which has been banned by 7 European countries, has been found in every water sample in the Willamette River Basin taken by USGS.

Pentachlorophenol

- Wood preservative
- Classified as a pesticide
- Used primarily for utility and telephone poles
- Several cleanup sites due to penta-treating facilities



Phthalates

- Phthalates are industrial compounds used to make soften plastics.
- Baby teethingers and soft toys
- PVC building material and flooring
- Hospital-use bags and tubes
- Certain food packaging



Bisphenol A

- Used in the production of epoxy resins and polycarbonate plastics (used in food and drink packaging).
- Resins used as lacquers to coat metal products such as food cans, bottle tops and water supply pipes.
- Some polymers used in dental treatments.



Solutions

■ Policy Solutions

- Product bans
- Pesticide use reporting and toxics use reporting
- Government purchasing policies
- Incentives for safer alternatives
- Stronger testing regime

■ Individual Actions

- Purchasing behavior
- Avoid pesticide use
- Eat low on the food chain

Policy Solutions

- Product bans or phase-outs (many European examples; a handful of states)
- Ban backyard burning
- Better consumer information (e.g. labeling)
- Pesticide use reporting
- Create incentives for safer alternatives

Policy Solutions (cont.)

- Require more testing of chemicals before they go into common usage (e.g. REACH)
 - EPA developing protocol
 - Low dose
- Government purchasing policies
 - Seattle PBT reduction initiative
 - San Francisco resolution
- Public Education and Outreach

Individual Actions

- Consumers can ask for toys, teethingers and rattles made without phthalates or PVC (see www.greenpeaceusa.org for a list
- Avoid plastics as much as possible, but especially #3, #6 and #7
- Avoid pesticides in homes and gardens
- Don't microwave food in plastic
- Avoid backyard burning

Information Resources

- Our Stolen Future (www.ourstolenfuture.org)
- EPA Endocrine Disruptor Program
(www.epa.gov/endocrine)
- Tulane University (e.hormone.tulane.edu)
- Collaborative on Health and the Environment
(www.protectingourhealth.org)
- OEC Online or OEC Solutions
(www.orcouncil.org)